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ABSTRACT

This study, designed to help planners and to provide a basis for comparison in future studies, reports on the characteristics of recreationists using Toledo Bend Reservoir. A questionnaire, constructed in consultation with representatives of various state agencies, was administered to the outdoor recreation population from July 1971 until late spring 1972. Sixty-one female and 544 males were interviewed concerning occupation, income, education, place of residence, distance traveled, and the size and nature of the recreationist groups. Findings reported are as follows: (a) a certain degree of affluence and sophistication is characteristic of Toledo Bend users; (b) men predominated in the Toledo Bend sample of users; (c) persons from age 25 to age 54 were slightly over-represented; (d) white Louisiana residents age 25 and over with an upper-level education were over-represented; (e) most Toledo Bend users earn a family income of $10,000 or over; (f) urban residents were over-represented; (g) distance has a positive relationship with the length of time spent at Toledo Bend; and (h) most respondents were members of groups. The results of this exploratory study indicate that Toledo Bend already serves as an important recreation facility and has the potential to meet the growing demands of the population. Beyond the implications for program and policy formulation, there are implications for understanding human behavior, which is basic to sociological inquiry. (A 5-item bibliography is included.) (PD)

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THE CHARACTERISTICS OF THE USERS OF TOLEDO BEND: A STUDY OF THE DEVELOPMENT POTENTIAL OF WATERBASED OUTDOOR RECREATION*

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Toledo Bend Reservoir is a 65 mile long man-made lake located on the Louisiana-Texas border. It was built through a cooperative effort between Texas and Louisiana. Overall control is carried out jointly but each state has responsibility for developing its own shoreline. Some 24 public sites for recreation facilities were set aside in the initial planning. Twelve were in Louisiana and eleven in Texas, with one site at the north end of the lake lying in both states. Louisiana has since added six more sites for a total of 18. Five of these are presently being developed. The greatest development on the Louisiana side has been in the private sector, with about 60 commercial establishments or marinas currently in operation.

Toledo Bend is located in the pine forest belt of eastern Texas and western Louisiana. It was built as a multiple use facility--hydroelectric power, flood control, navigation, and recreation. However, the recreation industry seems to have had the largest immediate impact on the economic well being of the area. In this context, it is appropos to note that the area surrounding Toledo Bend was considered economically depressed. Currently this body of water has a reputation for being one of the "hottest" fishing lakes in the country, especially for bass. A study done in 1971 by the Louisiana Department of Highways indicates that there are in excess of 4½ million visitations for recreation to the Reservoir annually. Since many persons stay several days and some for as long as several weeks, it is not unreasonable to assume an annual usage of at least ten to fifteen million visitor days. As can be seen, Toledo Bend's development potential lies not only in the economic benefits accruing to the area but also in its contribution to the fulfillment of the recreational needs and demands of the citizens of Louisiana and the nation. To help in meeting that development potential, the study, of which this paper is a partial report, had as one of its principal objectives the provision of benchmark data on characteristics of recreationists using Toledo Bend Reservoir.

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*The study from which this paper is derived is described in detail and bibliographical information given in Toledo Bend Reservoir: A Study of User Characteristics, Patterns, Preferences, Bulletin No. 675, Louisiana State University, Agricultural Experiment Station, Baton Rouge, Louisiana, 1973.

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The methodological approach for this study was an "on-site" survey in which data were obtained from persons engaging in recreation activity at Toledo Bend. A questionnaire was constructed in consultation with representatives of various state agencies in order to provide information helpful for planning purposes. Data collection began in July, 1971 and continued throughout the year until late spring of 1972.

The population universe for the study was defined as all persons engaged in outdoor recreation on the Louisiana side within one mile of the lake. Outdoor recreation was defined as including fishing, hunting, boating, hiking, swimming, camping, water skiing, picnicking, or sightseeing. Interviewers were stationed at key access locations on different days of the week and at different seasons of the year. They were instructed to interview anyone who was using the area for recreation purposes. Only one adult person per recreation group was interviewed, although information on the entire group was obtained.

While the sampling procedure used was admittedly not random, it was felt that the size of the sample (N=605) and the wide variety of sites from which the interviews were obtained (a total of 52 different locations), as well as the different time periods, assures representiveness sufficient for making generalizations suitable for planning purposes.

In most cases interviews were administered face-to-face. In those cases where the respondent did not have time for an interview he was given a questionnaire and a stamped, pre-addressed envelope. Such mailbacks accounted for only 42 of the 605 completed questionnaires.

Of the interviewees, 544 were males and 61 were females; only four (one female) of the total were black. The small number of blacks appears to be the result of very few black people using Toledo Bend for recreation purposes.

Characteristics of Toledo Bend Users

As previously stated, one of the major purposes of the present study was to provide benchmark data on the users of Toledo Bend which would be not only helpful to planners but provide a basis for comparison for future studies. For these reasons the characteristics of occupation, income, education, place of residence, distance traveled and size and nature of recreationist groups in the sample population was determined. Findings relative to these characteristics are as follows:

Occupation

Occupation of family heads was classified according to the broad job categories used in the United States Census with the exception that designations of "student", "military", and "retired" were added. It should be noted that the tacit assumption was made that the male's occupation was the principal occupational classification for family groups. Comparisons made of the sample population with the occupational distribution of white males sixteen years and above for both Louisiana and the nation shows that, as expected, Toledo Bend recreationists tend to come from what may be termed the broad middle class occupational strata. The comparisons made indicate that professional, technical and kindred workers were slightly over-represented among the recreationists sampled, while managers, officials and proprietors were greatly over-represented--twice what would be expected judging from their occurrence in the population of Louisiana. Clerical and kindred workers were slightly under-represented and sales workers over-represented by about one and one-half times as judged by comparison with the State distribution of occupations. The slight under-representation on the part of craftsmen, foremen and kindred workers was something of a surprise to the writers, since some researchers have found a curvilinear relationship to exist with regard to occupational prestige for the activity of fishing (Burdge, 1972). Since fishing is the principal recreational activity at Toledo Bend, the writers expected craftsmen, foremen and kindred workers to be over-represented, but this is not the case. This finding seems particularly unusual because operatives and kindred workers were slightly over-represented. As expected, service workers and laborers were under-represented and appeared only in about half the relative number they make up in the State's population.

Age and Sex

As expected, men were encountered more often among users of Toledo Bend than women. The surprising thing is that the difference is not greater than it was determined to be. The distributions for both males and females throughout the total age range were very similar. There is no particular "lumping" at a given age classification among users by either sex.

Children under five were slightly under-represented in the user sample population when compared to the State percentages in this age group, but this is not surprising. Persons aged 5-24 were represented in relative numbers just about equal to their presence in the State. However, beginning with age 25 and extending to age 54 a slight over-representation is found among Toledo Bend users as compared to the population of the State. After age 55, the sample of users shows an

under-representation when compared to the State population, but considerable user activity is evidenced by older persons. The findings of this study are consistent with those of previous studies (ORRRC, Rpt. No. 20, 1962, Johnson, 1967). There were 7.2 percent more males than females in the under five years age class, 15.4 percent in the 5-13 years group and 26.8 percent more in the 14-17 years class. The difference is no doubt accounted for by the incidence of fathers or uncles or grandfathers taking their sons, nephews or grandsons fishing, which is an expected role pattern. This pattern definitely indicates differential socialization of males and females insofar as this type of outdoor recreation is concerned.

Males were over-represented by only 10.8 percent in the 18-24 year age group, by only 12.4 percent in the 25-34 year age group and only 12.6 percent in the 35-44 year age group. This drop in male dominance can be explained because these are the ages when recreation as a family group is at its highest level. More will be said concerning this phenomena when make-up and characteristics of groups or parties are discussed.

In the 45-54 year age group males predominated over females by 20.6 percent and in the 55-64 year age range they predominated by 31.0 percent. Above age 65 this sex differential was down to 22.2 percent.

Education

Comparison of the educational attainments of persons in the Toledo Bend user sample population with white Louisiana residents aged 25 and over yielded expected results. The lower educational levels were under-represented and the upper levels over-represented in the sample population. This finding is consistent with the findings of other studies (Burch, 1967, ORRRC Rpt. Nos. 20 & 26, 1962).

Recreationists from Louisiana with eight or less years of schooling made up seven percent of the sample while persons with this educational level make up about 31 percent of the State's population. The 9-11 years of schooling group had only about half the representation in the user sample that one would expect from projections based on their frequency in the State population as a whole. However, high school graduates and persons with up to three years of college were counted among users 1½ times more frequently than their relative numbers in the State population. College graduates and persons with advanced degrees appeared as users twice as frequently as they appear in the State population.

Family Income

Respondents were asked to give the total income of their immediate family. When these distributions are compared to the State distribution

of white family incomes,* those with less than $8,000 are considerably under-represented among Toledo Bend users. The percentage of white respondents in the sample population whose family incomes ranged from $8,000 to $10,000 was just about equal to the percentage of the State's white population in these income classes. Among those persons claiming a family income of $10,000 and up, there was a marked over-representation among Toledo Bend users. The percentages of upper income groups in the sample of users was almost twice what would be expected, judging in terms of their relative number in the State population.

Residence

Urban areas were over-represented in the user sample population. Comparison with 1970 Census reports on Louisiana indicates that persons from towns ranging in size from 2,500 to 25,000 are about equal in their representation in the Toledo Bend sample and in the State population.

However, persons from places ranging in size from 25,000 to 100,000 persons are considerably over-represented in the user sample, appearing in twice the number which would be expected. Users claiming residence in places of 100,000 population and above were not over-represented in as striking a fashion, but were present in disproportionate number. It is likely that the advantages of increased income, education, and occupational opportunity, which many urban residents tend to have, are the important factors in their over-representation.

Distance Traveled

The distance which people must travel to reach an area suitable for the recreation purposes they have in mind appears to exert a considerable influence on their outdoor recreation activity.

Median distance traveled to get to Toledo Bend was about 150 miles, with 80 percent of the users traveling less than 250 miles. The furthest distance reported was 2,000 miles

Size of Party

Sociability has been suggested as a "cause" of participation in outdoor recreation. Sociability, as used here, refers to the inclination which people have to associate with others for the sheer pleasure of

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*Only whites were used because of the racial differentials in income and the few blacks in the sample population.

interaction, with no thought of practical aims or for other serious purposes. The data show that for the Toledo Bend sample, recreation was commonly a family affair with 85 percent of all respondents accompanied by persons related to them.

User groups or parties varied considerably in size. (The boundaries of the group or party were set by the interviewee--any persons identified by him as belonging to the party were included.) Only ten persons or 1.7 percent of the sample population, said they were alone. Two person parties were the modal size with 146 or 24.1 percent of the respondents indicating that one other person was in their party. The size of groups ranged up to thirty persons, but most groups did not exceed six persons. The median size of parties was four persons. Interestingly, many of the larger groups were in the nature of family reunions. Family units from various localities apparently meet at Toledo Bend, in order to visit and enjoy the activities available there together.

Conclusions

The major findings or conclusions reported in this paper may be outlined as follows.

The occurrence in the user sample of managers, officials and proprietors in twice the number expected judging from their occurrence in the Louisiana population is significant as is the under-representation of service workers and laborers who appear in about half the relative numbers they make up in the Louisiana population. The overall conclusion is that a certain degree of affluence and a certain sophistication in terms of outdoor recreation is characteristic of Toledo Bend users.

Men predominated in the Toledo Bend sample of users but not to the degree expected. This is a phenomena which is probably associated with the family nature of recreation by users of this facility.

Both the very young and the very old were under-represented in the sample. In contrast, persons from age 25 to age 54 were slightly over-represented. These are, of course, the ages more commonly associated with activities such as fishing and hunting. The predominance of young males over young females emphasizes a role and socialization differential.

Comparison of the educational attainments of persons in the Toledo Bend user sample population with white Louisiana residents age 25 and over shows that the lower levels of education are under-represented and the upper levels are over-represented in the sample population. This is a finding of importance for planners and developers.

Income characteristics of users were distributed in similar fashion to their education characteristics. Lower income groups (family income under $8,000) were considerably under-represented in the sample population while persons indicating a family income of above $10,000 was about twice what would be expected judging in terms of their relative number in the State population as a whole. Again, it is clear that affluence is related to the use of Toledo Bend.

It was determined that urban residents were over-represented and rural residents under-represented among the users of Toledo Bend when the residence of respondents was compared with the distribution of rural and urban residents in the general population of the State. This pattern may be the result of a desire on the part of urban dwellers to escape the stress of an urban environment or it may be the result of the increased advantages and opportunities of many urban residents which stem from higher education and income. There is also the possibility that rural residents are not attracted as much to an outdoor recreation facility. These conjectures need testing, although the important finding for this study was the urban origin of a majority of users.

Distance traveled to reach Toledo Bend was found to have a significant effect on participation at the reservoir. However, up to a three hour drive does not appear to be a deterrent. Distance was also shown to have a positive relationship with length of time spent at Toledo Bend. The farther people traveled the longer they intended to stay. This too, is logical.

The fact that sociability is a major motivation for engaging in outdoor recreation of the type available at Toledo Bend was demonstrated by the finding that virtually all of the respondents were members of groups and that most of these groups were composed of one or more families.

Again, it must be noted that blacks do not use the recreational opportunities afforded by Toledo Bend. As already indicated, only four blacks appeared among the total of 605 interviewees. They simply were not at Toledo Bend engaging in recreational pursuits.

Implications

The present study was exploratory to a great extent. The data gathered indicate that Toledo Bend not only serves as an important recreation facility, but has a potential to meet the growing recreation demands of a population which is becoming increasingly better educated, more affluent, more mobile and more urban. The information obtained on the characteristics of users has already been utilized by the State Planning Commission and other State agencies. Beyond the implications for program and policy formulation these are implications for understanding human behavior which is basic to sociological inquiry. Whether responsible public authority will take the

necessary development action to meet the expected rise in recreation demand at Toledo Bend remains to be seen as does the use which professional social scientists will make of the simplistic but meaningful descriptive data relating to outdoor recreation. All in all, it is clear that with proper administration Toledo Bend can be very successful, not only in meeting the needs of recreationists from Louisiana and elsewhere but in increasing the economic well-being of the surrounding area.

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